

the claimed process is specifically used to make the claimed compounds. Also, examining the compound claims and the process claims for making the claimed compounds would not impose a substantial additional search burden on the Examiner.

The claims 1-3, 8-11, and 13-14 were rejected under 35 USC 103 as obvious over Labeeuw et al., U.S. Patent 4,464,367. This is the only rejection of the claims. The Examiner did not consider the declarations submitted to rebut this rejection due to a typographical error. Reexecuted, slightly revised, declarations are submitted herewith.

The present invention provides the novel ceftiofur hydrohalide salt. As seen by the reexecuted declarations herewith, this salt has various advantages over the known salts of ceftiofur, including the fact that it surprisingly and unexpectedly conforms to a crystalline habit with marked advantages over the known salts. See paragraphs 3-8 of Mahendra I. Amin Declaration and paragraphs 7-14 of Jay A. Campbell Declaration. These advantages include stability, longer shelf life, ease of formulation and greater purity.

Obviously, the claimed invention can also exist in an amorphous form which possesses advantages over the known salts, as seen in paragraphs 15-16 of the Jay A. Campbell Declaration. While a compound and all of its properties must be considered for patentability, In re Papesch, (CCPA 1963) 315 F2d 381, 137 USPQ 43, 51, these properties should not become a limitation to the claim, where the invention is the compound itself. For example, if a novel compound has the advantage of being more cheaply and readily prepared as compared to the prior art, the claim to the compound should not be limited with the proviso "... only when prepared by means disclosed herein ...." Similarly, if a novel compound has an advantage over a known adjacent homologue of being useful in treating cancer, certainly the claim to the compound need not be limited to the anti-cancer use. In the present invention, the evidence of a crystalline form is merely one property of this salt, and it is a surprising and unexpected property not shared by similar cephalosporin compounds of the prior art, see paragraphs 10-14 of the Jay A. Campbell Declaration.

Therefore, Applicant should not be limited to claiming the crystalline form, but should be entitled to claim the novel compound per se. If the salt had been initially synthesized only in an amorphous form and surprising advantages resulted from this form, Applicant would not have had to add the

"amorphous limitation" to the claim to overcome an obviousness rejection. Analogously here, Applicant should not have to add the crystalline limitation to the claim to overcome a rejection under 35 USC 103. Its evidence of crystalline form is simply one of the many properties of the compound (which may also exist in an amorphous form) which makes it unexpectedly better, and therefore non-obvious, from the known derivatives of ceftiofur.

The above declarations are believed to be sufficient to overcome the rejection of the claims based upon the Labeeuw patent. They comply with 37 CFR 1.68 because they contain a reference to 18 USC 1001, and they are commensurate in scope with the generic claim since they discuss the properties of both the crystalline and amorphous forms.

Furthermore, the Labeeuw et al 4,464,367 patent discloses the same cephalosporin antibiotic compound used by Applicants here to make the claimed hydrohalide salts. (That cephalosporin is now known by its accepted generic name, ceftiofur (in France).) All of the salt groups disclosed in the Labeeuw patent refer to salts of the carboxyl group in the 4-position of the usual cephalosporin nucleus ring system. See column 1, lines 30-43, and column 3, lines 40 to 54. The present invention relates to hydrohalide salts of the free amino group in the 7-position side chain thereof. Nowhere does Labeeuw teach or suggest the salts of the present invention. Furthermore, the Examiner has presented no secondary references that would teach or suggest the salts of the present invention. And as noted above, the hydrohalide salts of the present invention have surprising and unexpected advantages over the prior art salts. Therefore, the claims 1-3, 8-11 and 13-14, (now claims 15-19 and 24-27) are believed to be patentably distinguishable over the Labeeuw patent.

The Examiner asked Applicants to comment on U.S. Patent 4,166,155. This patent which discloses a maintenance-free battery was mistakenly cited in the Information Disclosure Statement filed 12/12/86. It has no relevance to the instant application.

Reconsideration of this application, in view of the foregoing, is respectfully requested.

Respectfully submitted,

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Attachments:

Affidavit - Mahendra I. Amin  
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Claims